

Express Mail Label No.: EV392159301US
Date of Deposit: March 28, 2005

10/500171
Attorney Docket No. 28616-002 NATL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Wlassof et al.
Serial Number : 10/500,171 Examiner: Not Yet Assigned
Based on International Application No: PCT/AU/02/01767
International Filing Date : December 24, 2002 Art Unit: Not Yet Assigned
For : ENZYMATIC REDOX LABELLING OF NUCLEIC ACID

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

March 28, 2005
Boston, Massachusetts

TRANSMITTAL LETTER

Enclosed herewith for filing in the above-identified application please find the following documents:

1. Response to Notice of Defective Response (2 pgs.);
2. Copy of Notification of Defective Response (7 pgs.);
3. Petition for Extension of Time (1 pg);
4. Check No. 20293 in the amount of \$740.00;
5. Supplemental Preliminary Amendment (3 pgs.);
6. Substitute Paper Copy of Sequence Listing (2 pgs.);
7. Computer Readable Form Submission (1 disk);
8. Statement in Support of Computer Readable Form Submission (1 pg.);
9. Postcard

Please charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 28616-002 NATL. A duplicate copy of this Petition is enclosed.

Respectfully submitted,



Ingrid A. Beattie, Reg. No. 42,306
Attorney for Applicants
c/o MINTZ, LEVIN
Tel: (617) 542-6000
Fax: (617) 542-2241
Customer No. 30623

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial Number : 10/500,171 Examiner: Not Yet Assigned
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March 28, 2005
Boston, Massachusetts

RESPONSE TO NOTICE OF DEFECTIVE RESPONSE

In response to the Notice to Defective Response mailed February 18, 2005 and in further response to the Notice of Missing Requirements mailed September 27, 2004 in the above-identified application., Applicants submit herein a substitute computer readable form (CRF) copy of the "Sequence Listing", a substitute paper copy of the "Sequence Listing", a Statement in Support of Computer Readable Form Submission, a Supplemental Preliminary Amendment and a copy of the Notice of Defective Response.

In conjunction with the Response to the Notice of Missing Requirements filed December 22, 2004, Applicants previously submitted a Petition for a One-Month Extension of time, along with a check in the amount of \$55.00 to cover the petition fee under § 1.17(a)(1) as of December 22, 2004. Accordingly, Applicants submit herewith a Petition for a Four-Month Extension of Time, along with a check in the amount of \$740.00 to cover the petition fee. This amount represents the petition fee for a four-month extension under 37 C.F.R. §1.17(a)(3) as of March 25, 2005 (*i.e.*, \$795.00) reduced by the amount of money Applicant previously paid for the one-month extension of time under 37 C.F.R. §1.17(a)(1) (*i.e.*, \$55.00). Accordingly, Applicants believe no additional fees are due in connection with this filing.

With the four-month extension, these documents are due on Monday, March, 28, 2005 (March 27, 2005 being a Sunday). Should any questions or issues arise concerning this application, the Examiner is encouraged to contact the undersigned at the telephone number

provided below. The Commissioner is hereby authorized to charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 28616-002NATL.



Ingrid A. Beattie, Reg. No. 42,306
Attorney for Applicants
c/o MINTZ, LEVIN
One Financial Center
Boston, Massachusetts 02111
Tel: (617) 542-6000
Fax: (617) 542-2241
Customer No. 30623

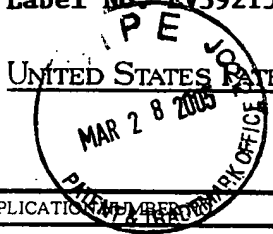
TRA 2019325v1

03-30-05

Page 1 of 2
PCT 6
Box 57

Express Mail Label No. EV392159301US

Date of Deposit: March 28, 2005



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER 10/500,171	FIRST NAMED APPLICANT Wjatschesslaw Wlassof	ATTY. DOCKET NO.
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INTERNATIONAL APPLICATION NO. PCT/AU02/01767

LA. FILING DATE 12/24/2002	PRIORITY DATE 12/24/2001
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Ingrid A Beattie
Mintz Levin Cohn Ferris Glovsky and Popeo PC
One Financial Center
Boston, MA 02111

CONFIRMATION NO. 5312
371 FORMALITIES LETTER

OC000000015191478

Date Mailed: 02/18/2005

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495)

- Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 06/24/2004
- Copy of the International Search Report filed on 06/24/2004
- Copy of IPE Report filed on 06/24/2004
- Preliminary Amendments filed on 06/24/2004
- Biochemical Sequence Diskette filed on 12/22/2004
- Oath or Declaration filed on 12/22/2004
- Biochemical Sequence Listing filed on 12/22/2004
- Small Entity Statement filed on 06/24/2004
- Request for Immediate Examination filed on 06/24/2004
- U.S. Basic National Fees filed on 06/24/2004
- Priority Documents filed on 06/24/2004
- Power of Attorney filed on 12/22/2004

Handwritten notes: A0, 3/27/05, 4/27/05 Final

Applicant's response filed 12/22/2004 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 09/27/2004 have not been met:

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821. The following reason(s):
 - A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of Annex C of the Administrative Instructions and 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
 - APPLICANT MUST PROVIDE:
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an

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FEB 28 2005
MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC
PATENT DOCKET DEPT

amendment directing its entry into the specification.

- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase PatentIn Software, call (703) 306-2600
 - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

WINSTON M ALVARADO

Telephone: (703) 308-9140 EXT 206

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/500,171	PCT/AU02/01767	

FORM PCT/DO/EO/916 (371 Formalities Notice)

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/500,171
Source: PCT/10
Date Processed by STIC: 1/26/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Please mail this report with the 916 notice.

Winston Alvarado
National Stage Processing
Paralegal Specialist
(703) 305-6421

Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	SERIAL NUMBER: <u>10/500,171</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <u> </u> Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <u> </u> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <u> </u> Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <u> </u> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <u> </u> Variable Length	Sequence(s) <u> </u> contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <u> </u> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) <u> </u> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <u> </u> Skipped Sequences (OLD RULES)	Sequence(s) <u> </u> missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <u> </u> Skipped Sequences (NEW RULES)	Sequence(s) <u> </u> missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <u> </u> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <u> </u> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <u> </u> Use of <220>	Sequence(s) <u> </u> missing the <220> "Feature" and associated numeric identifiers and responses. <u>Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown."</u> Please explain source of genetic material in <220> to <223> section. ← IMPORTANT (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <u> </u> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <u> </u> Misuse of n/Xaa	"n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u>	



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/500,171

DATE: 01/26/2005

TIME: 12:54:25

Input Set : A:\28616-002.ST25.txt

Output Set: N:\CRF4\01262005\J500171.raw

3 <110> APPLICANT: Wlassof, Wjatschesslaw
 4 King, Gerry C.
 6 <120> TITLE OF INVENTION: Enzymatic redox labelling of nucleic acids
 8 <130> FILE REFERENCE: 28616-002 NATL
 10 <140> CURRENT APPLICATION NUMBER: 10/500,171
 C--> 11 <141> CURRENT FILING DATE: 2004-06-24
 13 <150> PRIOR APPLICATION NUMBER: PCT/AU02/01767
 14 <151> PRIOR FILING DATE: 2002-12-24
 16 <160> NUMBER OF SEQ ID NOS: 6
 18 <170> SOFTWARE: PatentIn version 3.3
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 18
 22 <212> TYPE: DNA
 23 <213> ORGANISM: 8-mer primer
 25 <400> SEQUENCE: 1
 26 caacgtccga gcagtaca
 29 <210> SEQ ID NO: 2
 30 <211> LENGTH: 40
 31 <212> TYPE: DNA
 32 <213> ORGANISM: 40-mer template
 34 <400> SEQUENCE: 2
 35 aagctcctta gtctgtcaat gtactgctcg gacgttgcca
 38 <210> SEQ ID NO: 3
 39 <211> LENGTH: 25
 40 <212> TYPE: DNA
 41 <213> ORGANISM: 25-mer template
 43 <400> SEQUENCE: 3
 44 gctgatggag ctggtgttt tgctt
 47 <210> SEQ ID NO: 4
 48 <211> LENGTH: 31
 49 <212> TYPE: DNA
 50 <213> ORGANISM: 31-mer template
 52 <400> SEQUENCE: 4
 53 tatataagct tcatagacca gttacctcat g
 56 <210> SEQ ID NO: 5
 57 <211> LENGTH: 40
 58 <212> TYPE: DNA
 59 <213> ORGANISM: 40-mer template
 61 <400> SEQUENCE: 5
 62 aagctcctta gtctgtcaat gtactgctcg gacgttgcta
 65 <210> SEQ ID NO: 6
 66 <211> LENGTH: 18
 67 <212> TYPE: DNA

pp 1-2
Does Not Comply
Corrected Diskette Needed
invalid response
(see item 10 on Euro summary sheet)

18
 40
 25
 31
 40

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/500,171

DATE: 01/26/2005

TIME: 12:54:25

Input Set : A:\28616-002.ST25.txt

Output Set: N:\CRF4\01262005\J500171.raw

68 <213> ORGANISM: 18-mer primer

70 <400> SEQUENCE: 6

71 caacgtccga gcagtaca

18

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/500,171

DATE: 01/26/2005

TIME: 12:54:26

Input Set : A:\28616-002.ST25.txt

Output Set: N:\CRF4\01262005\J500171.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date